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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,629	01/14/2004	Mark James Kline	8194C	4664

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EXAMINER	
HAND, MELANIE JO	
ART UNIT	**PAPER NUMBER**
3761	

MAIL DATE	DELIVERY MODE
07/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/757,629	KLINE ET AL.	
	Examiner	Art Unit	
	MELANIE J. HAND	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5 and 8-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5,8-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the appeal brief filed on February 22, 2008, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Tatyana Zalukaeva/

Supervisory Patent Examiner, Art Unit 3761

Response to Arguments

2. Applicant's arguments, see appeal brief, pages 4-12, filed February 22, 2008, with respect to the rejection(s) of claim(s) 1,4,5 and 8-19 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the terms “first peak peel load value” and “second first edge” do not appear in the specification. As to the term “second first edge”, because this structural feature is not mentioned anywhere in the specification, it is unknown whether the drawings provide support for this feature.

Claim Objections

4. Claim 4 is objected to because of the following informalities: the phrase "second first edge" appears to contain a typographical error, as none of the other fastener element edges are named or claimed in this format, e.g. the first element has a first first edge and second first edge. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support in the disclosure for a second first edge. The term does not appear anywhere in the disclosure and it is further unclear from the drawings where on the disclosed first fastening element a second first edge would be.

6. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 14 recites ranges for the first peak peel load value which lie completely outside of ranges recited in claim 12 from which it depends.

> The following is a quotation of the second paragraph of 35 U.S.C. 112:
>
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 12 recites the broad

recitation "said first peak peel load value is greater than about 1,000 grams and the claim also recites "more preferably greater than about 1,300 grams, even more preferably greater than about 1,600 grams and most preferably greater than about 2,000 grams" which is the narrower statement of the range/limitation. In the present instance, claim 13 recites the broad recitation "said first peak peel load value is less than about 1,000 grams" and the claim also recites "more preferably less than about 750 grams, and most preferably less than about 500 grams" which is the narrower statement of the range/limitation. In the present instance, claim 14 recites the broad recitation "said first peak peel load value is less than about 1,000 grams" and the claim also recites "more preferably less than about 750 grams, and most preferably less than about 500 grams" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 4, 5 and 8-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polski (U.S. Patent No. 5,019,072).

With respect to **claim 1:** Polski teaches an article 10 to be worn about a wearer comprising a surface fastening system in the form of mating adhesive elements 24 and 26 necessarily having a primary direction of load bearing, namely the direction parallel to the waist circumferential direction of the diaper. The surface fastening system 24,26 includes a first surface fastening element in the form of an adhesive patch 24 and a second surface fastening element in the form of mating adhesive patch 26. The first fastening element 24 is joined to the article at ears 20, and the second fastening element 26 is disposed so as to be generally in a face to face relationship with the fast fastening element when the surface fastening system is in an engaged configuration to fasten at least a portion of the article. (Fig. 2, Col. 2, lines 39-48) The first surface fastening element 24. The surface fastening system necessarily has different levels of resistance in different directions to disengagement from the engaged configuration, owing to the difference in magnitude between the length and width of the fastener spanning the two different respective directions, and the fact that resistance to disengagement, or peel force, is normalized over a dimension, and thus a smaller dimension will yield less resistance to a particular load than a larger dimension.

Polski teaches a range of dimensions for the adhesive patches 24 and 26 and teaches that patches outside those ranges will exhibit T-peel forces that are either too small to retain the diaper around the user's waist, or too great such that the diaper may rip in the process of attempting to disengage the patches. Thus, Polski teaches that the larger dimension, which can be parallel to the longitudinal “Y” is a result-effective variable. Thus, Polski fairly suggests a single adhesive patch with multiple dimensions in the Y-direction that conform to the acceptable

range of T-peel load. It would be obvious to one of ordinary skill in the art to modify the effective Y dimensions extending substantially parallel to a longitudinal axis of the article such that the effective Y dimension increases from a distal edge of the first fastening element 24 to the proximal edge with a reasonable expectation of success such that the least amount of peel force is closest to the edge where the user will grab to disengage the diaper ears from each other for disposal. It has been held that the discovery of an optimum value of a result-effective variable in a known process is ordinarily within the skill of the art. See *In re Boesch and Slaney*, 205 USPQ 215 (C.C.P.A. 1980) Applicant has not explicitly and clearly disclosed or claimed what the edges are proximal or distal with respect to, therefore the claim is given its broadest reasonable interpretation. Since the fastening elements of Polski extend parallel to the longitudinal direction and the lateral direction is the primary direction of load bearing for peel force during use, the proximal edge is considered herein to be the edge of the fastening element that is closest the longitudinal centerline of article 10, and the distal edge is the edge that is opposite the proximal edge.

With respect to **claim 4:** The first fastening element fairly suggested by Polski has an effective "y" dimension that increases as one progresses from the proximal edge to the distal edge. Polski does not suggest that the first fastening element further includes a first edge and a second first edge being offset from the second edge in the direction of dimension Y, wherein the first edge is longer than the second edge.

With respect to **claim 5:** The second fastening element 26 further includes a longitudinally inboard edge. Polski does not teach that at least a portion of the longitudinally inboard edge is unjoined from the underlying structure of the article. However, since Polski teaches that the

fastening element is first formed, then joined to the article, and only two edges would require joining to the article to perform as intended, it would be obvious to posita to modify the article of Polski such that only two of the four edges are unjoined with a reasonable expectation of success to provide a fastener that still functions as intended with less use of adhesives or other materials to adhere the fastening elements. Specifically, it would be obvious to one of ordinary skill in the art to join the two edges that are laterally opposed, leaving both longitudinal edges unjoined, as the primary direction of peeling force will be in the waist circumferential direction.

With respect to **claim 8:** The article 10 of Polski further comprises a chassis including an absorbent member in the form of absorbent layer 16. (Col. 2, lines 33-36)

With respect to **claim 9:** The article 10 of Polski is a diaper. (Abstract)

With respect to **claim 10:** The article 10 of Polski is adapted to form a pant-like article as can be seen from Fig. 2, and wherein each of the first and second fastening elements 24,26 are releasably attached to form a waist opening and a pair of leg openings. (Fig. 2, Col. 2, lines 42-45)

With respect to **claim 11:** The surface fastening system of Polski necessarily has a first peak peel load value when measured subject to forces in a y'z-plane through y"z plane which is greater than a second peak peel load value when measured subject to forces in a xz plane, as the amount of force required to peel the fastening elements apart in a direction perpendicular to the direction having the longest dimension will be greater because the same peel force is normalized over a smaller area.

With respect to **claim 12:** Applicant has disclosed that the T-peel test is used to determine the disclosed and claimed peak peel load values. The first peak peel load value taught by Polski is between 4-7 N over 1.5-3 cm. (Col. 3, lines 15-20, 45-47) Applicant discloses that the claimed peak peel load values are over a fastening element having a 0.5 inch (1.27 cm) width for a T-Peel of 7.7 N/cm. Therefore, for a width of 1.5-3 cm, the peak peel load value is 11.6-23.1 N over 1.5-3 cm and thus the peak peel load value of Polski does not fall within the claimed range of greater than about 1000 grams, more preferably greater than about 1300 grams, even more preferably greater than about 1600 grams, and most preferably greater than about 2000 grams. Applicant has not explicitly and clearly quantified the phrase "about 1000 grams", therefore, and in light of the indefinite scope of the claim, the claim is given its broadest reasonable interpretation. Since Polski teaches that the range of T-peel values is a result effective variable that affects how the fastening elements with adhesive adhere to other surfaces, it would be obvious to one of ordinary skill in the art to modify the article of Polski such that the first fastening element has a T-peel or peak peel load value within the claimed range to ensure sufficient adhesion to secure the diaper during wear without tearing the diaper or the fastening element. It has been held that the discovery of an optimum value of a result-effective variable in a known process is ordinarily within the skill of the art. See *In re Boesch and Slaney*, 205 USPQ 215 (C.C.P.A. 1980)

With respect to **claim 13:** The second peak peel load value for the fastening element taught by Polski will necessarily be less than 4-7 N since the maximum load permissible (i.e. the peak peel load value or peak T-peel value) in the direction perpendicular to the primary direction of peeling will always be less than that in the primary direction of peeling. As stated *supra,* the first T-peel or peak peel load value of applicant's fastening element in the primary direction of

peeling by the user normalized over a width equal to that taught by Polski is 11.6-23.1 N. Thus a range of less than 1,000 grams for the second peak peel load value claimed is equivalent to a claimed range of "less than 23.1 N". The range of less than 4-7 N over 1.5-3 cm for the second peak peel load value suggested by Polski overlaps the broadest range set forth in claim 13 and thus renders the claim obvious.

With respect to **claim 14:** The second peak peel load value for the fastening element taught by Polski will necessarily be less than 4-7 N since the maximum load permissible (i.e. the peak peel load value or peak T-peel value) in the direction perpendicular to the primary direction of peeling will always be less than that in the primary direction of peeling. As stated *supra,* the first T-peel or peak peel load value of applicant's fastening element in the primary direction of peeling by the user normalized over a width equal to that taught by Polski is 11.6-23.1 N. Thus a range of less than 1,000 grams for the second peak peel load value claimed is equivalent to a claimed range of "less than 23.1 N". The range of less than 4-7 N over 1.5-3 cm for the second peak peel load value suggested by Polski overlaps the broadest range set forth in claim 14 and thus renders the claim obvious.

With respect to **claim 15:** The fastener element of Polski extends in two dimensions, "x" and "y" and can be moved in three dimensions by the user, "x", "y" and "z". Upon further review of applicant's disclosure, the y'z and y"z planes are translated versions of the y-z plane because an offset in one of the directions defined by the plane (in this case the y-direction) does not create a new plane. The y'z and y"z planes are coplanar with the y-z plane but are translated, in this case, by 60 degrees. Therefore, by teaching a y-z plane, Polski teaches an infinite number of smaller, offset planes that collectively define the y-z plane, two of which are necessarily a y'z plane and y"z plane projected to about 60 degrees from an imaginary longitudinal line.

With respect to **claim 16:** The surface fastening system 24,26 taught by Polski necessarily has different levels of resistance in different directions to peel mode disengagement from the engaged configuration. The same force is applied to the entire fastener element, however the force is distributed over different cross-direction widths, and therefore has different levels of resistance in different directions to peel mode disengagement.

With respect to **claim 17:** Polski teaches an article 10 to be worn about a wearer comprising a surface fastening system in the form of mating adhesive elements 24 and 26 necessarily having a primary direction of load bearing, namely the direction parallel to the waist circumferential direction of the diaper. The surface fastening system 24,26 includes a first surface fastening element in the form of an adhesive patch 24 and a second surface fastening element in the form of mating adhesive patch 26. The first fastening element 24 is joined to the article at ears 20, and the second fastening element 26 is disposed so as to be generally in a face to face relationship with the fastening element in a fastened configuration. (Fig. 2, Col. 2, lines 39-48) The first surface fastening element 24. The surface fastening system necessarily has different levels of resistance in different directions to disengagement from the engaged configuration, owing to the difference in magnitude between the length and width of the fastener spanning the two different respective directions, and the fact that resistance to disengagement, or peel force, is normalized over a dimension, and thus a smaller dimension will yield less resistance to a particular load than a larger dimension. The first fastening element 26 further includes a longitudinally outboard edge distal with respect to the waist opening of the diaper 10 and a longitudinally inboard edge opposing the outboard edge.

Polski teaches a range of effective dimensions Y for the adhesive patches 24 and 26 and teaches that patches outside those ranges will exhibit T-peel forces that are either too small

to retain the diaper around the user's waist, or too great such that the diaper may rip in the process of attempting to disengage the patches.(Col. 3, lines 13-30) Thus, Polski teaches that the larger dimension, which is parallel to the longitudinal "Y" is a result-effective variable. Thus, Polski fairly suggests a single adhesive patch with multiple dimensions in the Y-direction that conform to the acceptable range of T-peel load. It would be obvious to one of ordinary skill in the art to modify the effective Y dimensions extending substantially parallel to a longitudinal axis of the article such that the effective Y dimension increases from a distal edge of the first fastening element 24 to the proximal edge with a reasonable expectation of success such that the least amount of peel force is closest to the edge where the user will grab to disengage the diaper ears from each other for disposal. It has been held that the discovery of an optimum value of a result-effective variable in a known process is ordinarily within the skill of the art. See *In re Boesch and Slaney*, 205 USPQ 215 (C.C.P.A. 1980) Applicant has not explicitly and clearly disclosed or claimed what the edges are proximal or distal with respect to, therefore the claim is given its broadest reasonable interpretation. Since the fastening elements of Polski extend parallel to the longitudinal direction and the lateral direction is the primary direction of load bearing for peel force during use, the proximal edge is considered herein to be the edge of the fastening element that is closest the longitudinal centerline of article 10, and the distal edge is the edge that is opposite the proximal edge.

Polski does not teach that the longitudinally inboard edge being longer than the longitudinally outboard edge. Polski teaches a range of dimensions for the adhesive patches 24 and 26 and teaches that patches outside those ranges will exhibit T-peel forces that are either too small to retain the diaper around the user's waist, or too great such that the diaper may rip in the process of attempting to disengage the patches. Thus, Polski teaches that the larger dimension, which can be parallel to the longitudinal "Y" is a result-effective variable. Thus,

Polski fairly suggests a single adhesive patch with multiple dimensions in the Y-direction that conform to the acceptable range of T-peel load. It would be obvious to one of ordinary skill in the art to modify the effective Y dimensions extending substantially parallel to a longitudinal axis of the article such that the longitudinally inboard edge of the first fastening element 24 is longer than the longitudinally outboard edge with a reasonable expectation of success such that the least amount of peel force is closest to the edge where the user will grab to disengage the diaper ears from each other for disposal. In this case, when referring to the longitudinal direction of disengagement, the user will easily be able to disengage the fastening element when grabbing the bottom of the side of the diaper and peeling in opposite directions in the longitudinal direction and the edge nearest the waist (inboard edge) will have greater resistance so that it is secure abou the user's waist and harder to disengage. It has been held that the discovery of an optimum value of a result-effective variable in a known process is ordinarily within the skill of the art. See *In re Boesch and Slaney*, 205 USPQ 215 (C.C.P.A. 1980)

With respect to **claim 18:** The surface fastening system 24,26 taught by Polski necessarily has different levels of resistance in different directions to peel mode disengagement from the fastened configuration. The same force is applied to the entire fastener element, however the force is distributed over different cross-direction widths, and therefore has different levels of resistance in different directions to peel mode disengagement.

With respect to **claim 19:** The surface fastening system 24,26 taught by Polski necessarily has different levels of resistance in different directions to peel mode disengagement from the fastened configuration. The same force is applied to the entire fastener element, however the force is distributed over different cross-direction widths, and therefore has different levels of resistance in different directions to peel mode disengagement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE J. HAND whose telephone number is (571)272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melanie J Hand/
Examiner, Art Unit 3761
/Tatyana Zalukaeva/
Supervisory Patent Examiner, Art Unit 3761